

AMENDMENTS TO THE CLAIMS

The following is a complete listing of revised claims with a status identifier in parenthesis.

LISTING OF CLAIMS

1. (Currently Amended) A recording medium having a data structure for managing reproduction of at least video data representing multiple reproduction paths, comprising:

a data area storing a transport stream of at least video data, the transport stream being divided into transport packets, each of the transport packets associated with one of the multiple reproduction paths, and the transport packets of each reproduction path being interleaved with one another; and

a navigation area storing a first navigation unit, the first navigation unit including one or more second navigation units and controlling a reproduction order of the second navigation units, at least one second navigation unit referencing more than one third navigation unit, each third navigation unit indicating a separate file of video data in the data area to reproduce.

2. The recording medium of claim 1, wherein the transport packets associated with each reproduction path are grouped into data blocks, and the transport packets of each reproduction path are interleaved with one another on a data block by data block basis.

3. The recording medium of claim 2, wherein each data block represents at least an intra-coded picture of video data.

4. The recording medium of claim 3, wherein each data block represents at least one group of pictures (GOP).

5. - 8. (Canceled)

9. (Currently Amended) The recording medium of claim ~~[[6]]~~ 1, wherein the at least one second navigation unit data-item includes a multiple reproduction path indicator indicating that the at least one second navigation unit data-item provides navigation information for multiple reproduction paths.

10. (Canceled)

11. (Currently Amended) ~~The recording medium of claim 10, wherein the A~~
recording medium having a data structure for managing reproduction of at least video data representing multiple reproduction paths, comprising:
a data area storing a transport stream of at least video data, the
transport stream being divided into transport packets, each of the transport
packets associated with one of the multiple reproduction paths, and the
transport packets of each reproduction path being interleaved with one
another; and

a navigation area including ~~includes~~ a navigation data item, the navigation data item providing navigation information for reproducing each of the multiple reproduction paths, the navigation area including a navigation list, the navigation list including at least the navigation data item, and the navigation data item including a multiple reproduction path indicator indicating that the navigation data item provides navigation information for multiple reproduction paths.

12. – 13. (Canceled)

14. (Original) The recording medium of claim 1, wherein each reproduction path represents a digital channel.

15. (Original) The recording medium of claim 1, wherein each reproduction path represents a sub-channel of an RF channel.

16. (Currently Amended) A method of recording a data structure for managing reproduction of at least video data representing multiple reproduction paths, comprising:

recording a transport stream of at least video data on the recording medium, the transport stream being divided into transport packets, each of the transport packets associated with one of the multiple reproduction paths, and

the transport packets of each reproduction path being interleaved with one another; and

recording a first navigation unit on the recording medium, the first navigation unit including one or more second navigation units and controlling a reproduction order of the second navigation units, at least one of the second navigation units referencing more than one third navigation unit, each third navigation unit indicating a separate file of video data to reproduce.

17. (Currently Amended) A method of reproducing a data structure for managing reproduction duration of at least video data representing multiple reproduction paths, comprising:

reproducing a transport stream of at least video data from the recording medium, the transport stream being divided into transport packets, each of the transport packets associated with one of the multiple reproduction paths, and the transport packets of each reproduction path being interleaved with one another; and

reproducing a first navigation unit from the recording medium, the first navigation unit including one or more second navigation units and controlling a reproduction order of the second navigation units, at least one of the second navigation units referencing more than one third navigation unit, each third navigation unit indicating a separate file of video data to reproduce.

18. (Currently Amended) An apparatus for recording a data structure for managing reproduction duration at least video data representing multiple reproduction paths, comprising:

a driver for driving an optical recording device to record data on the recording medium;

a controller for controlling the driver to record a transport stream of at least video data on the recording medium, the transport stream being divided into transport packets, each of the transport packets associated with one of the multiple reproduction paths, and the transport packets of each reproduction path being interleaved with one another, and the controller configured to control the driver to record a first navigation unit on the recording medium, the first navigation unit including one or more second navigation units and controlling a reproduction order of the second navigation units, at least one of the second navigation units referencing more than one third navigation unit, each third navigation unit indicating a separate file of video data to reproduce.

19. (Currently Amended) An apparatus for reproducing a data structure for managing reproduction duration of at least video data representing multiple reproduction paths, comprising:

a driver for driving an optical reproducing device to reproduce data recorded on the recording medium;

a controller for controlling the driver to reproduce a transport stream of at least video data from the recording medium, the transport stream being

divided into transport packets, each of the transport packets associated with one of the multiple reproduction paths, and the transport packets of each reproduction path being interleaved with one another and the controller configured to control the driver to reproduce a first navigation unit on the recording medium, the first navigation unit including one or more second navigation units and controlling a reproduction order of the second navigation units, at least one of the second navigation units referencing more than one third navigation unit, each third navigation unit indicating a separate file of video data to reproduce.

20. (New) The recording medium of claim 1, wherein the third navigation units associated with the at least one of the second navigation units are each associated with a different one of the multiple reproduction paths.

21. (New) The recording medium of claim 20, wherein a number of the third navigation units associated with the at least one of the second navigation units is equal to a number of the multiple reproduction paths.

22. (New) The recording medium of claim 21, wherein the at least one of the second navigation units includes a field indicating whether the at least one of the second navigation units provides navigation information for multiple reproduction paths.